

AMENDMENTS TO THE CLAIMS

Claims 1-2 (canceled)

Claim 3 (previously presented): A mold apparatus for producing molded optical elements, said apparatus comprising:

a first mold unit for defining mold cavities and flow passageways;

a second mold unit having an integrated mold surface for sealing against said first unit, said integrated mold surface containing a plurality of patterns for molding optical patterns in the optical elements;

a mechanism for moving said first unit toward said second unit to form said flow passageways; and

mold pins for defining said mold cavities, said mold pins being located in said first mold unit.

Claim 4 (previously presented): The mold apparatus of claim 3, wherein said first mold unit has a front face opposed to said mold surface of said second mold unit, and wherein said flow passageways are formed in said front face.

Claim 5-11 (canceled)

Claim 12 (previously presented): A method for making molded optical elements, said method comprising the steps of:

providing a single metal puck with a plurality of optical patterns;

locating said single metal puck against a mold surface to seal a plurality of mold cavities and flow passageways formed upon said mold surface; and

subsequently, molding optical elements within said mold cavities such that said optical patterns of said single metal puck are formed in said optical elements; and

moving said mold surface toward said metal puck to form said flow passageways; and

using mold pins to define the thicknesses of said mold cavities.

Claim 13 (original): The method of claim 12, further comprising the step of flowing molten resin across said mold surface in radial directions toward said cavities.

Claim 14 (original): The method of claim 13, further comprising the step of using said metal puck to enclose said flow passageways.

Claims 15-16 (canceled)

Claim 17 (previously presented): A method of making a mold apparatus, said method comprising the steps of:

forming a plurality of optical patterns in a single metal puck;

locating said single metal puck against a mold unit to seal a plurality of mold cavities and flow passageways formed upon said mold surface; and

locating mold pins in said mold unit to define the thickness of said mold cavities.

Claim 18 (original): The method of claim 17, wherein said step of forming said patterns includes the step of using an analog gray scale mask to pattern photoresist material.

Claim 19 (original): The method of claim 17, wherein said step of forming said patterns includes ion milling.

Claim 20 (original): The method of claim 17, wherein said step of forming said patterns includes electron beam lithography.